

JC05 Rec'd PCT/PTO 30 SEP 2005

Re. Point V:

1. Reference is made to the following documents:

D1: EP-A-0 795 761

D2: EP-A-1 051 639, mentioned in the application

D3: DE 100 32 822 A, mentioned in the application

2. Document D1 is seen as the closest prior art in relation to the object of claims 1,13.

- 2.1 It discloses (the references in brackets relate to this document):

An arrangement with send means for transmitting a signal and with receive means for receiving a reflection of the sent signal, with the send means featuring a transmitting oscillator (see Fig. 8, number 30 is a transmitting oscillator), and that the receive means feature an evaluation oscillator (see D1 Fig. 8, number 35, is an oscillator which is also used for "gating" the receive path and can thus be viewed as an evaluation oscillator)

The object of claim 1 thus differs from D1 in that the transmitting oscillator can be excited by the evaluation oscillator and/or the evaluation oscillator by the transmitting oscillator in a quasi-phase coherent manner.

In D1 the two oscillators 30 and 35 are neither coherent nor quasi-phase coherent. The two oscillators are completely separate so that there is no coupling for excitation of the other oscillator. The phase coherence usually results from the use of a single oscillator, for the transmit and receive path.

The object of the claim 1 is thus new (Article 33(2) PCT).

- 2.2 The solution proposed in claims 1 and 13 of the present

application to achieve this object is based on an inventive step for the following reasons (Article 33(3) PCT):

**The object to be achieved with the present invention can be seen as the high-frequency switch being replaced by the switching of the power supply to the oscillator in the transmit path.**

After switch-on the transmitting oscillator is initially in a state of stable equilibrium. The transmitting oscillator is however initiated via a coupling in the frequency range of the receive oscillator and then excited quasi-phase coherently. The coupling over is undertaken by using an unshielded oscillator or via ground and/or supply lines.

This result achieved is that the maximum measurement range (instrumented range) the reduction of the average power is not restricted by switching between sending and receiving (see description Page 3 lines 18-35) since the receive oscillator is not influenced by the switchover of the transmitting oscillator.

Although document D3 describes the basic idea for implementing quasi-phase coherence, D3 restricts itself to the technical field of transponders, even if secondary radars are also mentioned (see D3 Para. [003]).

D3 makes no reference to the coupling of a transmitting oscillator with a receive oscillator (evaluation oscillator), to implement quasi-phase coherence the radar (primary radar).

Therefore the object of the claims 1 and 13 is based on an inventive step and meets the criterion given in Article

33(3) PCT.

Claims 2-12 and 14-15 are dependent on claim 1 or 13 and thus also meet the requirements of the PCT in relation to novelty and inventive step.

**Re. Point VII**

Claims 1 and 13 are not clear and do not meet the requirements of Article 6 PCT insofar as the object of the protection requirement is not clearly defined. The following functional specifications do not allow a person skilled in the art to establish which technical features are necessary to execute the function specified:

From the description on Page 9 lines 15-16 it can be seen that the following features are of significance for the definition of the invention.

- (1) can be excited in a quasi-phase coherent manner via a coupling (QPK)
- (2) that the supply voltage of the transmitting oscillator is switched on and off cyclically (see Page 3 lines 7-12 and Figures 2,3,4,5,7 all contain a voltage switch:"SWTX"). This objection could be overcome by including the features of claim 5.

Since the independent claims 1 and 13 do not contain these features, they do not meet the requirements of Article 6 PCT in connection with Rule 6.3 b) PCT, that each independent claim must contain all technical features which are of significance for the definition of the invention.